

Remarks

Claims 5, 6, 11-17, and 19-23 are pending in this application with entry of the above amendments. The Examiner previously withdrew from consideration as part of a restriction requirement claims 11-17. The Applicants have added claim 23; support for this new claim may be found in canceled claims 1-4, for example. Support for amended claims 19 and 22 may be found, for example, on page 22, lines 11-26. Amendments to claims 5, 19, 21 and 22 correct dependency issues arising from the cancellation of claims 1-4.

The Applicants address the Examiner's remarks in the order he presented them.

The Rejection under § 112, second paragraph

The Examiner rejected claims 1-9 and 18-22 under 35 U.S.C. § 112, second paragraph. The Applicants have amended the claims to better point out what the second component is of the fusion protein. Applicants submit that all the rejected claims now comport with the requirements of § 112. They respectfully request that the Examiner withdraw the rejection under this section.

The rejection under § 112, first paragraph

The Examiner rejected claim 10 under 35 U.S.C. § 112, first paragraph. The Applicants respectfully submit that their amendments to claim 10 address the Examiner's rejection under this section. They respectfully request that he therefore withdraw it.

The first § 102 rejection

The Examiner rejected claims 1-3 and 10 under 35 U.S.C. § 102(e) in view of Nakanishi *et al.* (U.S. Patent No. 6,235,521). The Examiner argues that Nakanishi *et al.* discloses a SV40-gpD fusion protein that anticipates the claims.

The claims, as amended in the present application, are directed to a fusion protein comprising a membrane-penetrating peptide and an organic molecule wherein the membrane penetrating peptide is derived from a nuclear localization

sequence or overlaps with a nuclear localization sequence that is derived from a transcription factor, which in turn is derived from a Period protein.

The cited referenced is silent as to the particular feature claimed by Applicants, i.e., a fusion protein wherein the membrane penetrating peptide is derived from a transcription facto, which in turn, is derived from a Period protein.

The Applicants respectfully submit that because Nakanishi *et al.* does not disclose this feature of the membrane-penetrating peptide, it fails to disclose each and every limitation of the claims, and, hence, cannot support a rejection under § 102(e). The Applicants therefore respectfully request that the Examiner withdraw the rejection under this section.

The second § 102 rejection

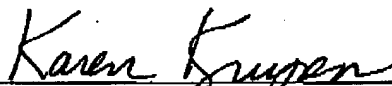
The Examiner rejected claims 1-3, 7-10, and 18-21 under 35 U.S.C. § 102(b) in view of Guarente *et al.* (Molec. Cell Bio., 578-585, Vol. 7, No. 2. (1987)). Guarente *et al.* discloses a *Saccharomyces cerevisia* HAP2 fusion protein. The Gurarente *et al* reference does not teach or suggest a fusion protein comprising a membrane penetrating peptide derived from a transcription factor wherein the transcription factor is derived from a Period protein.

The Applicants respectfully submit that because Guarente *et al.* does not disclose or suggest all the limitation of the claims, the reference cannot support a rejection under § 102(b). The Applicants respectfully request that the Examiner withdraw the rejection under this section.

Conclusion

The Applicants respectfully submit that the claims, as amended, are in condition for allowance, and respectfully request early, favorable action on the application. Should the Examiner believe that an interview would advance the prosecution of this application, the Applicants invite him to contact the undersigned at (908) 231-4658.

Respectfully submitted,



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